



REFERENCE		SI-ESF-M-BIPV-GG- M156-54-PERC	
ELECTRICAL CHARACTERISTICS		STC	
Maximum Power	[Pmpp]	Wp	270 275 280 285
Power selection	[Pmpp]	Wp	0/+5
Voltage at Maximum Power	[Vmpp]	Volts	30,03 30,19 30,35 30,62
Current at Maximum Power	[Impp]	Amperes	8,99 9,10 9,22 9,30
Open Circuit Voltage	[Voc]	Volts	36,52 36,68 36,82 37,03
Short Circuit Current	[Isc]	Amperes	9,42 9,60 9,75 9,84
Maximum System Voltage	[Vsyst]	Volts	1500 / 1000
Maximum Series Fuse Rating	[Icf]	Amperes	15
Efficiency	[η]	%	18,39 18,71 19,06 19,40
Form Factor	[FF]	%	78,48 78,02 77,95 78,15
ELECTRICAL CHARACTERISTICS		NMOT	
Maximum Power	[Pmpp]	Wp	199 202 206 210
Voltage at Maximum Power	[Vmpp]	Volts	27,34 27,49 27,63 27,88
Current at Maximum Power	[Impp]	Amperes	7,30 7,39 7,49 7,55
Open Circuit Voltage	[Voc]	Volts	33,38 33,53 33,65 33,85
Short Circuit Current	[Isc]	Amperes	7,64 7,79 7,91 7,98
MECHANICAL CHARACTERISTICS			
Dimensions	(X)	mm	992
	(Y)	mm	1480
	(Z)	mm	8
Weight	(area)	m ²	1,47
		kg	25,82
Front		Material	Glass
		mm	3,2
Encapsulant		Material	EVA
		mm	0,38
Cells		Type	mono (sc-Si)
		Size	156,75 x 156,75
		Matrix	6 x 9
		Quantity	54
Encapsulant		Material	EVA
		mm	0,38
Rear		Material	Glass
		mm	3,2
JUNCTION BOX			
Protection	Grade	IP	65
Diodes	Bypass	Quantity	4
Cables	(+/ -)	Quantity	2
		Length	900
		Section	4
Connectors	(+/ -)	Type	MC-T4
		Quantity	2
THERMAL CHARACTERISTICS			
Temperature coefficient of short circuit current α	[Isc]	%/°C	0,0814
Temperature coefficient of open circuit voltage β	[Voc]	%/°C	-0,391
Temperature coefficient of maximum power γ	[Pmpp]	%/°C	-0,5141
Temperature coefficient of current at maximum power	[Impp]	%/°C	0,1
Temperature coefficient of voltage at maximum power	[Vmpp]	%/°C	-0,38
Nominal Module Operating Temperature	[NMOT]	°C	47±2
TOLERANCES			
Working temperature		°C	-40/+85
Dielectric Isolation Voltage		V/DC	3000
Relative humidity		%	0/+100
Wind resistance		Pa	2400
Mechanical load-bearing capacity		Pa	8000
Maximum hail resistance		Ø	28
		m/s	23
Conductivity at ground		Ω	≤ 0,1
Resistance		Ω	≥ 100
CLASSIFICATIONS			
Application		Class	A
Electrical protection		Class	II
Fire resistance		Class	A
Pollution		Degree	1
Material		Group	I
Safety		Factors	1.5
GUARANTEES			
Manufacturing Defects		Years	12
Performance	90% of rated power	Years	12
	80% of rated power	Years	25
DESCRIPTION			
Silicon Cell Photovoltaic Module mono (sc-Si), BIPV-Glass/Glass series, for architectural integration, from the manufacturer SOLAR INNOVA, maximum power (Wp) 270-285 W, voltage at maximum power (Vmpp) 30,03-30,62 V, current at maximum power (Impp) 8,99-9,30 A, open circuit voltage (Voc) 36,52-37,03 V, short circuit current (Isc) 9,42-9,84 A, efficiency 18,39-19,40 %, composed of 54 cells, front layer tempered glass thick 3,2 mm, encapsulating layers of cells EVA, back layer of tempered glass thick 3,2 mm, junction box (diodes, cables 4 mm ² , 900 mm γ connectors MC-T4), working temperature -40/+85 °C, dimensions 992x1480 mm, maximum wind load 2400 Pa, maximum snow load 8000 Pa, weight 25,82 kg.			